

Wisconsin Department of Transportation
GENERAL ECONOMICS IMPACT EVALUATION

Alternative: C (VP/VE 4R) Is this the Preferred Alternative? Yes	Portion of project this sheet is evaluating if different from the first Basic Sheet
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1) Describe, briefly, the existing economic characteristics of the area around the project. This could include type(s) of farming, retail or wholesale businesses, manufacturing, tourism, or other elements contributing to the area's economy and potentially affected by the project.

The economic characteristics of the project area vary in conjunction with the land use. The area surrounding the project north of the Big Rib River is primarily commercial and industrial with some scattered residential. Recreational activity is present due to nearby Rib Mountain, the Big Rib River, and other parks. Commercial activity is generated by several large retailers, some small retail businesses, grocery stores, restaurants, and professional office buildings. Both heavy and light industry are present in the area. A hospital/insurance complex is also present.

2) Discuss the economic advantages and disadvantages of the proposed action. Indicate how the project would affect the characteristics described in item 1 above.

The proposed action would improve the operational characteristics of the roadway system in and outside of the interchange area. Reduced congestion will allow for motorists to move more freely and quickly between destinations. This improved mobility will allow more motorists to move throughout the area to visit the commercial properties. Improved regional mobility will let businesses and manufacturers move goods more efficiently in and outside of the Wausau area. The improved geometric configuration of the interchange and local roadways will reduce fuel consumption and travel times.

The interchange improvements will reduce the potential for incidents. A reduction in incidents will reduce economic loss due to loss of life, personal injury, and property damage.

The addition of recreational facilities on local roads such as sidewalks and bike paths will provide opportunities for more recreational users to enter the area. The business generated by these users will enhance the economy of the area.

There will be commercial relocations associated with the preferred alternative. Although the businesses will no longer be at their present location, they will be relocated within the Wausau area.

3) In general, will the proposed action increase or decrease the potential for economic development in the area influenced by the project.

The improved interchange area, including the local streets, will allow for easier and more efficient travel in and through the Wausau area. The reconfiguration of the interchange will provide some land in the area to be used for business relocations and potential future development. There is also great potential for businesses and industries to move to the Wausau area due to these improvements.

Wisconsin Department of Transportation
COMMUNITY OR RESIDENTIAL IMPACT EVALUATION

Alternative: C (VP/VE 4R) Preferred? Yes	Portion of project this sheet is evaluating if different from First Basic Sheet
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1) Give a brief description of the community or neighborhood affected by the proposed action.

Community/neighborhood name The project is located within the Town of Rib Mountain, Town of Stettin, and City of Wausau.

Community/neighborhood population	Town of Rib Mountain – 7,556	Community is un-incorporated Yes
	Town of Stettin – 2,191	Community is un-incorporated Yes
	City of Wausau – 38,426	Community is un-incorporated No

This information was obtained from the U.S. Census website www.census.gov.

Community/neighborhood Characteristics

The Town of Rib Mountain has a population of 7,556. Of this population, 3.5% are minority and 9.7% are over the age of 65. The median age is 38. There are 2,697 households in the township with 99.1% of the population living in these households. The average family size is 3.08 people.

The Town of Stettin has a population of 2,191. Of this population, 3.2% are minority and 11.9% are over the age of 65. The median age is 40.3. There are 805 households in the township with 100% of the population living in these households. The average family size is 3.01 people.

The City of Wausau has a population of 38,426. Of this population, 14.1% are minority and 17.1% are over the age of 65. The median age is 36.5. There are 15,768 households in the city with 96.6% of the population living in these households. The average family size is 3.08 people.

In Marathon County 26.8% of the population is under the age of 18 while 13.0% is over the age of 65. The 1995 median household income was \$40,078. Marathon County experienced a 5.8% increase in population between 1990 and 1995.

This information was obtained from the U.S. Census website www.census.gov.

2) Identify and discuss the existing modes of transportation and their traffic within the community or neighborhood

Automobiles are the main transportation mode in the communities and comprise nearly all of the traffic generated. The City of Wausau has a public bus system. The city also has a paratransit service to transport people to and from the hospital complex. Neither of these services extend into the Town of Stettin or Town of Rib Mountain. A taxi service does provide service for all of the communities.

There are few sidewalks and bike paths in the project area.

The Wausau Municipal Airport is located within two miles of the project area.

3) Identify and discuss the probable changes resulting from the proposed action to the modes of transportation and their traffic within the community or neighborhood.

Few changes are expected to the existing modes of transportation due to the proposed action. Traffic will operate in a more efficient and safe manner after construction.

Proposed sidewalks and bike paths will promote pedestrian and bike travel throughout the area. These types of transportation promote fitness and benefit the community by improving health.

4) Briefly discuss the proposed action's effect(s) on existing and planned land use in the community or neighborhood .

The proposed action is consistent with the land use in the area. Most of the land within the proposed interchange is zoned for commercial and industrial use. The land surrounding the area not used for roadway purposes will continue to be commercial and industrial land. The improved access and mobility to this land will be a benefit by efficiently moving customers and goods in and out of the area.

The residential neighborhoods close to the project area will remain unaffected by the proposed action. These neighborhoods are fully developed and no relocations are planned in these areas. Residents will have a new local street system that will provide easier access to the businesses in the area and the surrounding communities.

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5) Address any changes to emergency services or other public services during and after construction of the proposed project.

Emergency service and public services should be relatively unaffected during construction. The construction will be phased over several years. Access to the hospital complex will be maintained at all times. Although some roads may be closed during different phases of construction, access to the adjacent roadways and communities will be maintained. Coordination between contractors and local emergency services will be required during construction.

After construction emergency and public services will have more efficient access to the hospital complex due to the changes in the local road system and access points to the freeway. Responding to incidents on the freeway will also be easier due to the increased shoulder widths and expanded bridges. The proposed West Arterial and McCleary Bridge projects will also add relief during and incident by allowing traffic to be rerouted to these roadways. Currently the only crossing of the Big Rib River is USH 51/STH 29 and CTH N.

6) Describe any physical or access changes and their effects to lot frontages, driveways, or sidewalks. This could include effects on side slopes or driveways (steeper or flatter) reduced terraces, tree removal, vision corners, sidewalk removal, etc.

Access from USH 51 to the local road system will remain much as it is today with diamond interchanges at STH 52 (Stewart Avenue), and West Bridge Street and a half diamond interchange at Sherman Street. Access from STH 29 to the local road system will be consolidated from the existing loop ramps at 28th Street and the STH 52 intersection to one intersection with STH 52. This will ease driver confusion and provide a "gateway" to the City of Wausau.

Access and driveways to businesses that remain will be mostly unaffected. Access points may be consolidated to eliminate friction points in an attempt to improve safety by reducing accidents. Sidewalks will be added in front of most of these businesses.

Intersections will be expanded and relocated. New right-of-way will be required to accomplish these improvements. Proper vision triangles and sight distances will be accommodated during design of these intersections.

Access between USH 51 and STH 29 will be accommodated by proposed system to system free-flow interchange. This will replace the existing diamond interchange at Stewart Avenue.

7) Indicate whether a community/neighborhood facility will be affected by the proposed action and indicate what effect(s) this will have, overall, on the community/neighborhood. Also include and identify any minority population or low-income population that may be affected by the proposed action.

None will be affected.

8) Place an "X" in the appropriate box below if one of the populations indicated would be affected by the proposal. Give a brief description of the community/neighborhood and population affected by the proposed action. Include demographic characteristics of those affected by the proposal.

For the populations shown below, The Orders issued by the U.S. Department of Transportation and its implementing agencies to satisfy the requirements of Executive Order 12898 require an evaluation to determine whether a minority and/or low income population would experience a disproportionately high and adverse effect. If any of the populations shown below are affected, the Environmental Justice Factor Sheet, along with the remaining items on this worksheet, will need to be completed to satisfy Environmental Justice requirements

a) ☒ **NO** Disabled population is not affected

☐ **YES** Disabled population is affected – See Environmental Justice Factor Sheet

b) ☒ **NO** Elderly population is not affected

☐ **YES** Elderly are affected - See Environmental Justice Factor Sheet

c) ☒ **NO** Minority populations are not affected

☐ **YES** Minority populations are affected - See Environmental Justice Factor Sheet

d) ☒ **No** Low-income populations are not affected

☐ **Yes** Low income populations are affected - See Environmental Justice Factor Sheet

9) Identify and discuss, in general terms, factors that residents have indicated to be important or controversial.

It was noted several times during the public involvement process that the improvements were necessary to relieve traffic congestion in the area. Concern was raised over which businesses would be relocated with the understanding that some would be relocated regardless of the alternative chosen.

10) Indicate the number and type of any residential buildings which would be removed because of the proposed action. If either item a) or b) is checked, items 11 through 18 do not need to be addressed or included in the environmental document.

a) ☒ None -

b) ☒ No occupied residential building will be acquired as a result of this project.

c) ☐ Occupied residential building(s) will be acquired. Provide number and description of buildings, e.g., single family homes, apartment buildings, condominiums, duplexes, etc. If item c) is checked, you must complete items 11 through 18.

11) Estimate the number of households that would be displaced from the Occupied residential buildings identified in item 10 c) above.

Total Number of households to be relocated
(Note that this number may be greater than the number shown in 10 c) above because an occupied apartment building may have many households.)

i) Number by Ownership

Number of households living in owner-occupied building

Number of households living in rented quarters

ii) Number of households to be relocated that have:

1 bedroom

2 bedrooms

3 bedrooms

4 or more bedrooms

iii) Number of relocated households by type and price range of dwelling

Number of single- family dwellings in the price range of

Number of single- family dwellings in the price range of

Number of multi-family dwellings in the price range of

Number of multi-family dwellings in the price range of

Number of apartments in the price range of

Number of apartments in the price range of

12) Describe the relocation potential in the community.

a) Number of available dwellings that have:

1 bedroom

2 bedrooms

3 bedrooms

4 or more bedrooms

b) Number of available and comparable dwellings by location

Number of available and comparable dwellings within

Number of available and comparable dwellings within

Number of available and comparable dwellings within

c) Number of available and comparable dwellings by type and price. (Include dwellings in price ranges comparable to
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those being dislocated, if any.)

Number of available and comparable single family dwellings in the price range of

Number of available and comparable single family dwellings in the price range of

Number of available and comparable single family dwellings in the price range of

Number of available and comparable multi-family dwellings in the price range of

Number of available and comparable multi-family dwellings in the price range of

Number of available and comparable multi-family dwellings in the price range of

Number of available and comparable apartments in the price range of

Number of available and comparable apartments in the price range of

Number of available and comparable apartments in the price range of

13) Identify all the sources of information used to obtain the data in item 12.

☐ WisDOT Real Estate

☐ Multiple Listing Service (MLS)

☐ Newspaper listing(s)

☐ Other - Identify:

14) Indicate the number households to be relocated that have the following special characteristics:

Number of minority households

Number of elderly households

Number of households with disabled residents.

Number of low Income households

Number of households made up of a large family (5 or more individuals)

Number of households for which it is not known whether they have special characteristics

Number of households with no special characteristics

15) Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA regulation 49 CFR Part 24

16) Identify any difficulties or unusual conditions for relocating households displaced by the proposed action

17) Indicate whether Special Relocation Assistance Service will be needed? Describe any special services or housing programs needed to remedy identified difficulties or unusual conditions noted in item #14 above

☐ No

☐ Yes - Describe services that will be required

18) Describe any additional measures which would be used to minimize adverse effects or provide benefits to those relocated, those remaining, or to community facilities affected.

Wisconsin Department of Transportation
**ECONOMIC DEVELOPMENT AND,
BUSINESS IMPACT EVALUATION**

Alternative: C (VP/VE 4R)	Portion of project this sheet is evaluating if different from the first Basic Sheet
Preferred alternative - Yes	

1) Describe the economic development or existing business areas affected by the proposed action.

The proposed action will impact the area of commercial development located primarily between Sherman Street, 28th Avenue, STH 29, and USH 51/STH 29. This area is made up of several commercial buildings that house businesses primarily in the service and professional field. Approximately 33 businesses will require relocation as a result of the proposed action. There are four nationally known retail chains/franchises present, three of these will need to be relocated.

There is little room for new economic development in the existing immediate interchange area. The proposed action will geometrically reconfigure the roadways so that land once occupied by highway will now be available for economic development or business relocation.

2) Identify and discuss the existing modes of transportation and their traffic within the economic development or existing business area.

Automobiles and trucks are the primary mode of transportation in the area. Congestion regularly occurs in the project area because of the number of vehicles using the roadway. The proposed action is meant to eliminate this congestion and promote more efficient traffic movement in the area, which in turn will benefit the overall economy.

The City of Wausau has a public bus service that extends to the outer limits of the city but does not serve the Town of Stettin or Town of Rib Mountain. The City of Wausau also offers paratransit service to and from the hospital complex. A taxi service does offer service to all areas.

There are a limited number of bicycle trails and sidewalks in the project area. The proposed action would increase these numbers to invite more pedestrian traffic and recreational bicycling into the area. The additional bike facilities are being proposed to complete the existing gaps in some regional trails. This increase in pedestrian traffic would potentially increase customers and economic vitality in the area.

The Wausau municipal airport is located within two miles of the interchange area.

3) Place an "X" in the appropriate box below if one of the populations indicated would be affected by the proposal. Give a brief description of the community/neighborhood and population affected by the proposed action. Include demographic characteristics of those affected by the proposal.

For the populations shown below, The Orders issued by the U.S. Department of Transportation and its implementing agencies to satisfy the requirements of Executive Order 12898 require an evaluation to determine whether a minority and/or low-income population would experience a disproportionately high and adverse effect. If any of the populations shown below are affected, the Environmental Justice Factor Sheet, along with the remaining items on this worksheet, will need to be completed to satisfy Environmental Justice requirements

a) ☐ **NO Disabled population is not affected**

☒ **YES Disabled population is affected - See Environmental Justice Factor Sheet**

There are disabled employees working for businesses that will be relocated as part of the proposed action.

b) ☐ **NO Elderly population is not affected**

☒ **YES Elderly are affected – See Environmental Justice Factor Sheet**

There are elderly employees working for businesses that will be relocated as part of the proposed action.

c) ☐ **NO Minority populations are not affected**

☒ **YES Minority populations are affected - See Environmental Justice Factor Sheet**

There are minority business owners and employees that will be relocated as part of the proposed action.

d) ☒ **No Low-income populations are not affected**

☐ **Yes Low income populations are affected - See Environmental Justice Factor Sheet**

4) Identify and discuss effects on the economic development potential and existing businesses that are dependent upon the transportation facility for continued economic viability.

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☐ The proposed project will have no effect on a transportation-dependent business or industry.

☒ The proposed action will change the conditions for a business that is dependent upon the transportation facility.
Identify effects, including effects that may occur during construction.

Several businesses in the proposed interchange area are dependent on the transportation facility. These dependencies are primarily due to delivery vehicles both to and from the respective businesses. During construction these activities may be somewhat disrupted but access will remain open to all businesses during construction. The proposed actions will improve access to the remaining businesses making it easier for these trucks to get to and from their destination.

5) Estimate the number of businesses and jobs that would be created or displaced because of the project.

a) Total number created ☒ None

Number created by type including number of jobs

Retail businesses created	Retail jobs created
Service businesses created	Service jobs created
Wholesale businesses created	Wholesale jobs created
Manufacturing businesses created	Manufacturing jobs created

b) Total number displaced 33 ☐ None

Number displaced by type and number of jobs

Retail businesses displaced	28	Retail jobs displaced	279
Service businesses displaced	5	Service jobs displaced	150
Wholesale businesses displaced	0	Wholesale jobs displaced	0
Manufacturing businesses displaced	0	Manufacturing jobs displaced	0

6) Identify any special characteristics of the created or displaced businesses or their employees.

a) Number of created businesses by special characteristics: ☒ None

Number of created businesses that will employ elderly
serve elderly

Number of created businesses that will employ disabled
serve disabled

Number of created businesses that will employ low-income people
serve low-income people

Number of created businesses that will employ a minority population
serve a minority

b) Number of displaced businesses by special characteristics: ☐ None

Number of displaced businesses that employ elderly
serve elderly 4
26

Number of displaced businesses that employ disabled
serve disabled 3
27

Number of displaced businesses that employ low-income people
serve low-income people 0
25

Number of displaced businesses that employ minority population
serve a minority 5
29

7) Is Special Relocation Assistance Needed?: ☒ No

☐ Yes - Describe special relocation needs

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8) Describe the business relocation potential in the community.

The business relocation potential in the community is excellent. There are a number of available sites within a short distance of the proposed action. Several of the business owners to be relocated have stated that they are looking forward to new sites. There is also great potential for new buildings to be constructed in the immediate area of the interchange after construction due to newly available land. New buildings will be required for the larger retail businesses in the area.

a) Total number of available business buildings in the community

There are 22 business buildings for sale and 29 business buildings for lease in the surrounding community.

b) Number of available and comparable business buildings by location

Number of available and comparable business buildings within 5 miles: 22 for sale, 29 for lease

c) Number of available and comparable business buildings by type and price (Include business buildings in price ranges comparable to those being dislocated, if any.)

Number of available and comparable single business buildings in the price range of \$0 - \$200,000: 6

Number of available and comparable single business buildings in the price range of \$200,000 - \$400,000: 10

Number of available and comparable single business buildings in the price range of \$400,000 - \$500,000: 1

Number of available and comparable multi- business buildings in the price range of \$300,000 - \$500,000: 2

Number of available and comparable multi-business buildings in the price range of \$500,000 - \$1,000,000+: 3

9) Identify all the sources of information used to obtain the data in item 8.

☒ WisDOT Real Estate

☒ Multiple Listing Service (MLS)

☒ Newspaper listing(s)

☐ Other - Identify:

10) Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA regulation 49 CFR Part 24.

Commercial project assurances: "Assist owners of displaced business concerns and farm operations in obtaining and becoming established in suitable business locations or replacement farms." (Sec. 32.25(2)(b) of the Wisconsin Statutes)

The Commercial Properties affected by this project will be assisted in their relocation in the following manner:

- a. Maintain listings of vacant commercial properties.
- b. Maintain close contact with local real estate agencies and brokers dealing in commercial space.
- c. Inform business concerns of the Small Business Administration entitlements when federal aid is involved.
- d. Contact local development corporations and other similar organizations to make all possible assistance available.
- e. Assist in securing and making moving arrangements.
- f. Joint development of inventory of personal property to be moved.
- g. Advise businesses in site management procedures and occupancy terms and conditions.
- h. Advise them of their relocation claim entitlements and assist them in filing the claim with full documentation.

Contact with each commercial displacee will be made at regular intervals during which various leads or referrals will be offered. Visitations will be geared to the complexity, the specific needs and the level of availability of replacement properties and will be repeated until the relocation agent's responsibilities are completely and fully discharged and are in compliance with the spirit and the intent of the program.

11) Identify any difficulties for relocating a business displaced by the proposed action and describe any special services needed to remedy identified unusual conditions.

The only difficulty that has been identified is finding a suitable site for one of the larger retail businesses. It is desirable to relocate the businesses currently located within the Town of Stettin, within the Town of Stettin to maintain the town's tax base. This may be difficult.

12) Describe any additional measures which would be used to minimize adverse effects or provide benefits to those relocated, those remaining, or to community facilities affected.

None.

13) Generally describe both the beneficial and adverse effects accruing to:

a) The area's economic development potential or existing business area caused by the proposed action. Include any

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factors identified by business people that they feel are important or controversial.

There is potential for the Town of Stettin to lose some of its tax base if some of the businesses can not relocate within the town. Efforts are being made to relocate the businesses within the town.

The reconfiguration of the roadways within the interchange area will open up new areas available for economic development that were previously covered by roads. So, although some land is being acquired and some businesses relocated, there is potential for new development to replace the displacements.

b) The employment potential and existing employees in businesses affected by the proposal. Include, as appropriate, a discussion effects accruing to minority populations or low-income populations.

It is the intent at this time to relocate all the businesses being displaced within the surrounding area, thus allowing all employees to keep their jobs. In addition the new areas being made available for economic development will potentially create new employment opportunities.

Wisconsin Department of Transportation
Environmental Justice Evaluation

Alternative: C (VP/VE 4R) Preferred? Yes	Portion of project this sheet is evaluating if different from the first Basic Sheet
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1) Give a brief description of the minority population and/or low-income population affected by the proposed action. Include the size of the population(s) and their pertinent demographic characteristics. [A minority population means any readily identifiable group of minority persons including the elderly or disabled (see item 2 below for definitions of Title VI protected minorities) who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed program, policy, or activity. Low-Income_Population means any readily identifiable group of low-income persons (having a household income at or below the U.S. Department of Health and Human Services poverty guidelines) who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, policy, or activity.]

☐ No minority populations or low-income populations are present in the areas influenced by the project (Process is complete if the No box is checked)

☒ Yes, a minority population or low-income population is located in the areas influenced by the project. (Complete the remaining items on this Factor Sheet.)

The Town of Rib Mountain has a population of 7,556. Of this population, 3.5% are minority and 9.7% are over the age of 65.

The Town of Stettin has a population of 2,191. Of this population, 3.2% are minority and 11.9% are over the age of 65.

The City of Wausau has a population of 38,426. Of this population, 14.1% are minority and 17.1% are over the age of 65.

There are no disproportionately high and adverse effects on minority residents. Effects on the minority residential population will be the same as the non-minority population.

There are minority business owners with businesses located in the project area.

2) Identify and give a brief description of the minority population or low-income population affected by the proposed action. Include the size of the population and their pertinent demographic characteristics. (Check all that apply.)

☐ Black (having origins in any of the black racial groups of Africa)

☐ Low income

☐ Elderly

☐ Disabled

☐ Hispanic (of Mexican, Puerto Rican, Cuban or South American, or other Spanish culture or origin, regardless of race)

☐ Low income

☐ Elderly

☐ Disabled

☒ Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands)

☐ Low income

☐ Elderly

☐ Disabled

☒ American Indian and Alaska Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition)

☐ Low income

☐ Elderly

☐ Disabled

☒ Non-minority population

☐ Low income

☒ Elderly

☒ Disabled

The minority and non-minority populations being affected by this project are owners and employees of the businesses being relocated. These people make up a small percentage of the overall number of owners and employees being affected. There are no residential displacements.

3) Identify and describe issues of concern or controversy to the minority population or low-income population.

☒ No issues of concern or controversy identified

☐ Issues of concern or controversy identified below- Describe issues and how they were resolved.

4) Identify and describe effect(s) to the minority population or low-income population.

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Indicate which other environmental factors are involved or inter-related. ☒ General Economics
☐ Community & Residential ☒ Economic Development & Business ☐ Agriculture ☐ Wetlands
☐ Streams & Floodplains ☐ Lakes & Other Open Water ☐ Upland ☐ Erosion Control
☐ Storm Water Management ☐ Air Quality ☐ Construction Stage Sound Quality ☐

Traffic Noise

☐ Section 4(f) & 6 (f) ☐ Historic Resources ☐ Archeological Resources
☐ Hazardous Substances and USTs ☐ Aesthetics ☐ Coastal Zone

5) Indicate whether effects to a minority population or a low-income population are beneficial or adverse

☐ Only beneficial effects will occur. Describe effects on affected population and discuss whether they are direct, indirect or cumulative, include a discussion of any measures to enhance beneficial effects.

☒ Identified adverse effects are proportionate to those experienced by the general population. Describe effects on affected population and discuss whether they are direct, indirect or cumulative, include a discussion of any measures to avoid, minimize, or mitigate adverse effects.

There are 2 identified minority business owners (out of 33 total businesses), who will have their businesses relocated as a result of the proposed action. There are also a small number of minority employees being displaced. The overall percentage of minority owners and employees within the project area is small. Although there will be inconvenience and disruption while relocating the business, the direct impacts due to the proposed action are not disproportionately high or adverse enough to abandon the proposed action. Mitigation will be in the form of relocating the business and payments to make the business whole.

☐ Identified effects are disproportionately high and adverse. *A disproportionately high and adverse effect means an adverse effect that: 1) is predominately borne by a minority population and/or a low-income population; or 2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.*

Describe disproportionately high and adverse effects on affected population and discuss whether they are direct, indirect or cumulative, include a discussion of any measures to avoid, minimize, or mitigate disproportionately high and adverse effects or enhance beneficial effects.

5) Indicate whether the individuals in the affected population(s) are protected under Title VI of the 1964 Civil Rights Act. (See item 2 above for definitions of Title VI minorities.)

☐ No Title VI protections do not apply, but other requirements under the Age Discrimination Act or Americans With Disabilities Act do apply. Describe effects and how they will be avoided, minimized or mitigated.

☒ Yes Title VI protections apply. Describe any special services, considerations, or mitigation that will be used to avoid, minimize, or mitigate effects to Title VI individuals.

Minority business owners to be relocated will be treated equally to the non-minority business owners being relocated. Displaced minority employees will be treated equally as well.

6) Will the project/alternative be carried out even with disproportionately high and adverse effects on a minority population or low-income population.

N/A

☐ No the project/alternative will not be carried out in keeping with EO 12898

☐ There is no substantial need for the project/alternative

☐ Another alternative with less severe effects on the minority population or low-income population can meet the needs of this and is practical.

☐ Yes, will be carried out with the mitigation of disproportionately high and adverse effects.

☐ Yes, a substantial need for the project/alternative exists based on the overall public interest and alternatives that would have less adverse effects on minority populations or low-income populations have either:

☐ adverse social, economic, environmental, or human health impacts that are more severe ; or

☐ would involve increased costs of an extraordinary magnitude

7) Identify and discuss mitigation and enhancement efforts to address disproportionately high and adverse effects to Title VI protected minority people if different from those shown in item 5 above.

N/A

Wisconsin Department of Transportation
WETLANDS IMPACT EVALUATION

Alternative: C VP/VE (4R) Preferred? Yes	Portion of project this sheet is evaluating if different from the first Basic Sheet. From Mallard Lane to Bridge Street
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1) Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other.

The work will be primarily excavation/fill as required to construct the new six-lane typical section. Reconstruction and widening beyond the existing R/W extends the project into various wetlands along the Big Rib River corridor. Excavation below subgrade (EBS) or over excavation of deep organic or wetland soils may be necessary pending geotechnical boring information. Wetlands soils not containing a purple, loosestrife seedbank in the project area will be salvaged and redeposited on side slopes or in wetland mitigation areas. Activity will also include isolated R/W wetland disturbance, drainage structures, cross culverts, stormwater basin construction, and utility installations in some areas.

2) Describe the location of wetland(s) affected by the proposal. Include wetland name(s), if available. (Use maps, sketches, or other graphic aids.)

The approximate mapped wetland boundaries are shown on a map in Exhibit 10. Approximately five main types of wetlands were identified in the project area North of Mallard Lane to West Bridge Street: Wet Meadow (M), Scrub-shrub (SS), Deep Marsh (DM), Aquatic Bed (AB), and Wooded Swamp (WS). Some wet meadow and wooded swamp areas of the Rib River Crossing could be considered riparian emergent (RPE) or riparian forested areas (RPF). Final determinations and mitigation related issues will be handled during design.

See Attached Wetland Fill Table Provided in Exhibit 10.**3) This wetland is:**

All of the below listed associations are applicable. Approximately 16 wetland areas are small, flat drainage impeded, roadside ditches that occur in both hydric and non-hydric soil mapped areas. They are less than 1 acre in size and an additional 4 wetlands are only between 1 and 2 acres in size. The majority of the impacts relate to wet meadow or R/W impacts and wooded swamp impacts to the Big Rib River floodplain.

☒ **Isolated from stream, lake or other water body (e.g., perched wetland).**

Wetlands in the STH 29 West Area (Numbered 20-26 on the map in Exhibit 10) are isolated and bounded by STH 29 to the south, Stewart Avenue to the North, and 28th Avenue to the east. Wetlands in the West Bridge Street Area (Numbered 31-38 on the map in the Exhibit 10) are isolated and bounded by Bridge Street to the North, 17th Avenue to the east, and Wood Drive to the west. Wetland 30 is an isolated depression of cattails in the USH 51 on-ramp at STH 52.

☒ **Adjacent (within 5-year floodplain) to a stream thread.**

Wetlands near USH 51 near Stewart Avenue North (Numbered 27-30 in Table 1 in Exhibit 10) are adjacent to drainage channels flowing to the Big Rib River near the southeast quadrant of USH 51 and Sherman Street.

☒ **Contiguous (in contact) with a stream, lake, or other water body.**

Wetlands North of Mallard Lane along USH 51 to the west and east (Numbered 18 and 19 in Table 1 in Exhibit 10) are contiguous with the Big Rib River.

A portion of this drainage paralleling the east side of USH 51 follows a recently reconstructed drainage way that extends to a large box culvert under USH 51 near Wetland 29 at USH 51 and Sherman. It extends west to 27th Street and 27th Place. Thus, wetlands 27- 30 are hydrologically connected to the Rib River wetlands (Also Number 18).

Identify corresponding stream, lake, or other water body by name or town-range location:

Drainage Channel/Urban Streamthread : NW 1/4 of Section 34 T29N, R7E, is an apparent navigable/Ch 30 drainage channel currently being evaluated for maintenance (sand clogged) by DNR and the City. The larger streamcourse is discussed above and in the Streams and Floodplains Section.

Big Rib River: T29N, R7E, Section 34 Floodplain
T28N, R7E, Section 3

NOTE: If wetland is contiguous or adjacent to a stream, complete Streams Factor Sheet.
If wetland is contiguous to a lake or other water body, complete Water bodies Factor Sheet.

4) List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland. (List should include both permanent and seasonal residents).

Species living, breeding, and foraging in the area include white tail deer, raccoons, opossum, turtles, skunks, rabbits, muskrats, other small mammals, wood turtles, frogs, numerous song birds, swallow, red tailed hawks, Canadian geese, and various puddle duck species (mallards, blue-winged teal, woodduck, and hooded merganser). Other birds seasonally migrate through the area. Waterfowl also nest and raise young in the vicinity of the Big Rib River crossing with a high dependence on invertebrates in the backwater seasonal basins of the Rib River floodplain. Isolated wetlands in roadside ditches have less habitat value, especially when an environmental corridor does not exist.

5) Are there any known endangered or threatened species affected by the project?☒ **No**

The wood turtle (*Clemmys insculpta*), a state threatened species, has been surveyed in the study area. The redside dace is a state special concern species. No impacts to this species or the warm water sport fishery are expected according to DNR coordination. The DNR indicates impacts to these turtles can be avoided by placing silt fence along the project to prevent turtles from entering the construction area. As part of the mainline environmental evaluation the DNR recommended reviews/surveys for birds, amphibians, and freshwater mussel species. The need for these assessments will be determined as project planning continues. Impacts to affected species will be assessed and coordinated with resource agencies once they are determined.

☐ **Yes Identify the species and indicate whether it is on Federal or State lists.**

☐ **Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.**

☒ **Coordination with DNR has been and is on-going. Describe mitigation required to protect the State listed species. (See above).**

6) FHWA Wetland Policy☐ **Not Applicable - Explain**☒ **Individual Wetland Finding Required - Summarize why there are no practicable alternatives to the use of the wetland.**

Given the orientation of the project and Big Rib River corridor, wetland impacts could not be reduced below the 7.4 acre limit for the alignment considered. Wetland avoidance and minimization procedures have been evaluated in conceptual design and will be evaluated further during preliminary design. The final wetland impacts of 11.24 acres of this revised EA are more than the 6.55 acres estimated in the May 2001 FONSI, but are based on field delineations, surveys, and evaluation of alignments. The other alternatives in the value planning/value engineering involved substantially more impacts to wetlands (>15 acres addition) and would have fragmented the Big Rib River floodplain corridor. Practicable alternative analysis will be evaluated throughout the planning process.

☐ **Statewide Wetland Finding NOTE: All must be checked for the Statewide Wetland Finding to apply.**

☐ **Project is either a bridge replacement or other reconstruction within 0.5 km (0.3 mile) of the existing location.**

☐ **The project requires the use of 3 hectares (7.4 acres) or less of wetlands.**

☐ **The project has been coordinated with the DNR and there have been no significant concerns expressed over the proposed use of the wetlands.**

7) Erosion control or storm water management measures that will be used to protect the wetland are shown on either or both the Erosion Factor Sheet or the Stormwater Factor Sheet:☒ **Yes** ☐ **No - Briefly Describe measures to be used**

A detailed Stormwater Management Plan is being developed for use by designers. Wetland and stormwater issues were observed and will be addressed as illustrated in Exhibit 8 of the Stormwater and Erosion Control Section.

8) Section 404 Permit ☐ **Not Applicable - No fill to be placed in wetlands**

☒ **Applicable - Fill will be placed in wetlands.**
Indicate area of wetlands filled 11.42 Acres (5.19 Hectares)

☒ **Individual Section 404 Permit required**

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☐ **General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404**

Indicate which GP or LOP required

☐ Non-Reporting GP☐ Provisional GP☐ Provisional LOP☐ Programmatic GP**9) Section 10 Waters****For navigable waters of the United States (Section 10) indicate which Nationwide Permit is required**

N/A: Big Rib River is tributary to the Wisconsin River but is not considered the same. Thus, it is preliminarily determined not to be a Section 10 Waterway.

Indicate whether Preconstruction Notification (PCN) to the U.S. Corps of Engineers(USACE) is:

☐ Required☐ Submitted on (Date) N/A**Status of PCN**

USACE has made the following determination on (Date) N/A

USACE is in the process of review, anticipated date of determination is: (Date) N/A

10) Identify wetland type(s) that will be filled or converted to another use. Use the DOT Wetland Bank System. (See FDM Procedure 24-5-10, Figure 2.) If the National Wetlands Inventory (NWI) or Wisconsin Wetlands Inventory (WWI) are used to identify the types of wetlands, translate them to the DOT Wetland Bank System.**a) Approximate areas of wetlands filled or converted by type.**

Wetland Type Wet meadow,	Area of Wetland Type	5.95 Acres	(2.41_Hectares)
Wetland Type Scrub-shrub	Area of Wetland Type	1.86 Acres	(0.75 Hectares)
Wetland Type AB/Deep Marsh	Area of Wetland Type	0.16 Acres	(0.06_Hectares)
Wetland Type Wooded Swamp/RPF	Area of Wetland Type	3.26 Acres	(1.32_Hectares)

See explanation provided in Section 2 and Exhibit 10 for Wetland Impact Tracking form Information wetland type.

11) Wetland Mitigation**(NOTE: Avoidance, minimization, or mitigation is required.)****a) Wetland Avoidance****i) Describe methods used to avoid the use of wetlands, such as using a lower level of improvement or placing the roadway on new location, etc.**

Traffic modeling and previous engineering determined that the addition of two lanes were required for the mainline cross-section. The roadway will therefore go from a 4-lane to a 6-lane facility. Roadway fill slopes will be minimized given the required cross-section. Wetland impact minimization was used during alignment consideration of the Value Engineering/Value Planning Process of Fall/Winter 2001-2002. Selection of alternative 4R minimized additional impacts and fragmentation of the Big Rib River corridor by eliminating far west STH 29 interchange alignment.

ii) Indicate the total area of wetlands avoided

Alignment selection of 4R avoided 15 acres of wetlands that would have been impacted under Alternative 7.

b) Minimize the amount of wetlands affected**i) Describe methods used to minimize the use of wetlands, such as a steep up of side slopes or use of retaining walls, equalizer pipes, upland disposal of hydric soils, etc.**

The wetland minimization techniques for the project will be addressed on a project by project basis for USH 51 Corridor.

Potential techniques are listed in the Wetland Documentation in Exhibit 10.

- A retaining wall and other minimization or enhancement techniques are under consideration for wetlands 17 and 18, where STH 29 West fly over ramp is planned.
- Similarly, a rustic steel guard rail could minimize fill slopes at the Big Rib River or along streamcourses.

ii) Indicate the total area of wetlands saved through minimization 2-3 acres cumulative Acres 1-1.5 (Hectares)

(Pending)

c) Compensation for unavoidable loss

i) Is compensation of unavoidable wetland loss required?

☒ Yes ☐ No

ii) Describe efforts to replace unavoidable wetland loss

A draft conceptual wetland mitigation plan letter has been drafted for the WisDOT. See Exhibit 11 for a Conceptual Wetland Mitigation Plan. This will be shared with resource agencies once a formal plan is submitted to the district. The plan would integrate the construction requirements, borrow, stormwater, and wetland functional mitigation needs for the project. The plan will provide habitat and wetland replacement while addressing purple loosestrife control requirements. The Conceptual Plan seeks to integrate the need for the following:

- Need for 1 Million CYs and 2 Million CYs of borrow for the north and south USH 51 project areas.
- Need for providing over 100 to 200-acre-feet of stormwater floodplain storage.
- Need for mitigation of approximately 12 acres (37 for total mainline and arterial area) of wetland mitigation
- The maximum use of existing WisDOT ownership.

☐ Not Applicable

Note: If type and amount of compensation is known, complete item d) on following page.

Conceptual wetland mitigation plan proposed August 2002 to WisDOT. See Exhibit noted above.

d) Type and amount of compensation

☒ **On-Site Replacement- Wetland replacement located in the general proximity of the project site within the same local watershed. These replacements are often contiguous to the project.**

Wetland type of on-site replacement

(Pending) See Pending Conceptual Wetland Mitigation Plan, Exhibit 11.

Total area of on-site replacement Acres (Hectares)

☒ **Near-Site or Off-site Replacement - Replacement opportunity for wetland compensation within a 8.05 kilometers (5 mile) corridor centered over the highway alignment or a wetland replacement located away from the project site, generally outside the project's local watershed.**

Also under consideration. See Exhibit 11.

Wetland type of off-site replacement

Total area of off-site replacement _ Acres (_Hectares)

☐ **No near or off-site replacement - Describe reasons no near or off-site opportunities were found.**

☒ **Wetland Mitigation Bank Site - A wetland compensation site containing wetland credit areas and types from bank developed wetland restoration/creation projects or surplus areas from the wetland compensation projects of specific DOT facility development projects.**

Banksite to be considered as a last resort. The DNR and USACE has indicated that every effort should be made to mitigate wetlands on or near site. This is because of items presented in the Wetland Compensation Plan Exhibit and item "c" mentioned above. The scarcity of wetlands in Wausau is a major concern of agencies.

Indicate name or location of wetland mitigation bank site to be used for the replacement of unavoidable wetland loss.

Wetland type of bank-site replacement

Total area of bank-site replacement _ Acres (_Hectares)

Describe decision process used to determine the use of the bank-site and provide any coordination documentation with regulatory or resource agencies.

Pending, DNR has expressed interest in replacement of wetland habitat and floodplain storage because of general lack of wetlands in Wausau, with the exception of the big Rib River Corridor. The USACE has similarly expressed an interest in having the project address the loss of wetlands and floodplain storage.

Wisconsin Department of Transportation
STREAMS AND FLOODPLAINS IMPACT EVALUATION

Alternative: C (VP/VE 4R) Preferred? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Portion of project this sheet is evaluating if different from the first Basic Sheet From Mallard Lane to West Bridge Street	
1) Name of Stream Big Rib River		2) Location of Stream T28N-R7E Sec. 3 & T29N-R7E Sec. 34	
3) Stream Type Indicate Stream Class if Known <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Warm water <input type="checkbox"/> Trout-Class <input type="checkbox"/> Wild and Scenic River		4) Size of upstream Watershed Area <input checked="" type="checkbox"/> Permanent Flow (year-round) <input type="checkbox"/> Temporary Flow (dry part of year)	
5) Stream Characteristics			
a) Substrate <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt <input checked="" type="checkbox"/> Clay <input type="checkbox"/> Cobbles <input type="checkbox"/> Other-describe: Mixed to shallow water waterbody with various backwaters and ditches.			
b) Average Water Depth 3-5'		c) Vegetation in Stream <input type="checkbox"/> Absent <input checked="" type="checkbox"/> Present - If known describe: High flow areas contain shifting sand, muck and cobbles. Off-channel areas have lower flow with lily pads and submerged aquatics.	
d) Identify Fish Species Present walleye, large and small mouth bass, northern pike, muskie, silver and shorthead redhorse, white sucker and forage species		e) If water quality data is available, include this information (e.g. DNR or local discharger might have such records). Surface waters resources of Marathon County is available. The Wisconsin River, a downstream receiver, is on the EPA 303d list as an impaired water. A mercury advisory for fish consumption has been issued. In general, water quality is average to below average because of commercial land use in area.	

6) Are there any known endangered or threatened species affected by the project?☒ No

Previous documents indicate Marathon County has been identified as a breeding group area for the bald eagle, which is on the Federally threatened list. The eagle has been delisted on the state level. No nests are known near the Big Rib River. DNR coordination indicates impacts to the state threatened species, the wood turtle (*Clemmys insculpta*), can be avoided by placing silt fence along the project to prevent the turtles from entering the construction area. The black redhorse, found in Lake Wausau, is a fish on the state's endangered species list. The Redside dace is a state special concern species. Both are on a common listing for this area of the state. Other species on the special concern list include the black sandshell, fluted shell, and elktoe that are freshwater mussels found in the Big Rib River. The DNR states that proper erosion control will minimize fish impacts and that a mussel survey should be conducted closer to construction to determine if mussels are present within the construction area. See previous and current DNR agency coordination and U.S. Fish and Wildlife Service coordination in Exhibit 7.

☐ **Yes Identify the species and indicate whether it is on Federal or State lists.**
(Pending evaluations – Coordination)

☐ **Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.**

☐ **Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.**

7) If bridge replacement, are migratory bird nests present?☐ No☒ **Yes – Identify Bird Species present:****Estimated number of nests is:**

Swallow nests are present. A confirmatory review/check is to be conducted closer to the construction date to determine construction requirements.

8) Is a U.S. Fish & Wildlife Depredation Permit required to remove migratory bird nests?

☐ Not Applicable ☐ Yes ☒ No - Describe mitigative measures

Due to the presence of swallow nest underneath the structures at The Big Rib River, construction of the proposed action would take place outside the active nesting season (May 15 – August 20) and/or drop nets would be installed prior to May 15 to keep the birds away during construction. The replacement structures would likely be similar to the existing and the area would be expected to be recolonized.

9) Describe land adjacent to stream. If wetland, give type.

Land adjacent to the Big Rib River at the USH 51 crossing is primarily floodplain forest wetlands and backwater oxbows and swamps (WS/RPE). Wetlands along the slope or in previously disturbed R/W are generally meadow (M). Other habitats types beyond the toe of slope in the Rib River floodplain are forest and scrub/shrub types. On the north bank of the river, there are a few businesses and a residential area. Some residential areas are located in upland (non-floodplain) fingers of land.

10) Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site.

The Big Rib River discharges into Lake Wausau. On the north bank of the Big Rib River, on the west side of USH 51, is a site that has been identified as a potential arsenic and solid waste debris site. A metal factification plant also has performed some environmental cleanup for contaminants west of 28th Street/Sherman in an area of a stormwater outfall.

11) Section 404 Permit ☐ Not Applicable - No fill to be placed in wetlands

☒ Applicable - Fill will be placed in wetlands.

Indicate area of wetlands filled 11.42 Acres 5.19 (Hectares)

☒ Individual Section 404 Permit required

See Wetland Factor Sheet.

☐ General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404

Indicate which GP or LOP required

☐ Non-Reporting GP

☐ Provisional GP

☐ Provisional LOP

☐ Programmatic GP

12) Section 10 Waters

For navigable waters of the United States (Section 10) indicate whether the U.S. Coast Guard has been notified?

☒ No ☐ Yes - Describe results of Notification

Identify which Nationwide Section 404 Permit is required

Indicate whether Preconstruction Notification (PCN) to the U.S. Corps of Engineers(USACE) is:

☐ Required

☐ Submitted on (Date) NA

Status of PCN

USACE has made the following determination on (Date) NA

USACE is in the process of review, anticipated date of determination is: (Date) ☒ NA

13) Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment. (Note: U.S. Coast Guard must be notified when Section 10 waters are affected by a proposal)

The proposed action would replace the existing four-lane bridge with a similar, six-lane, multi-span structure at the Big Rib River.

This is a longitudinal crossing within the 100-year floodplain at 1168 MSL. Backwater effects are less than the 0.1 foot difference requiring additional mitigative actions.

14) Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be consistent with NR 116, the National Flood Insurance Program, and Governor's Executive Order #73.

The existing backwater condition, per DNR/DOT cooperative agreements, would be improved or maintained by the proposed structure. This is consistent with state and local floodplain zoning.

15) Describe and provide the results of coordination with any floodplain zoning authority.

FEMA floodplain maps were used in reference to the proposed project area and the project falls within 100-year and 500-year floodplains. Based on this information the project would incorporate design variations to avoid and minimize impacts to the surrounding environment.

16) Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?:

- ☒ **No impacts would occur** (Less than 0.1 foot change)
- ☐ **Significant interruption or termination of emergency vehicle service or a community's only evacuation route**
- ☐ **Significant flooding with a potential for property loss and a hazard to life**
- ☒ **Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.**

Not applicable to the project as it is a linear expansion of an existing roadway. However, mitigative precautions and plans will seek to minimize floodplain, habitat, and species specific impacts.

17) Discuss existing or planned floodplain use and briefly summarize the project's effects on that use.

The proposed action would not affect the longterm functions or use of the floodplain. Fill into wetlands and below the 100-YR floodplain would generally alter the habitat of the area.

18) Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream.

The primary impacts to water quality during construction would be erosion runoff from exposed grades and slopes and siltation that will carry with it sand, gravel, and dirt. After construction, the primary concern would be run-off from the roadway after rain or snow-ice thaws. There would be little impact to plants, animals, and fish since the nature of the proposed project is nearly the same as the original. Salt-spray of traffic appears to influence the presence of tree and shrub species near the roadway. Salt tolerant species should be used in restoration or landscaping plans.

19) Describe proposed measures to minimize adverse effects or to enhance beneficial effects.

Erosion control measures implemented would conform to the contracts special provision and the standard specifications listed in WisDOT's Standards and Specifications for Road and Bridge Construction.

WisDOT, through TRANS 401 and the Cooperative Agreement, would comply with the substantive permit requirements of Chapter 283 Wis. Stats., Wisconsin Pollutant Discharge Elimination System.

Also, specific measures or recommendations are discussed in Factor Sheet O, Erosion control/Stormwater Management.

20) Erosion control or storm water management measures that will be used to protect the stream are shown on The Erosion Control Factor Sheet and the Stormwater Management Factor Sheet:

- ☒ **Yes** ☐ **No Briefly Describe measures to be used such as sheet piling, cofferdam, turbidity barrier, barges, construction blackout window, etc.**

See Wetland and Stormwater observations Exhibit 8 depicting the issues for the project. Also see the Erosion Control and Stormwater Factor Sheet.

Project designers are to address current and pending concerns and otherwise protect the aquatic environment as possible.

Wisconsin Department of Transportation
STREAMS AND FLOODPLAINS IMPACT EVALUATION

Alternative: C (VP/VE 4R) Preferred? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Portion of project this sheet is evaluating if different from the first Basic Sheet From Mallard Lane to West Bridge Street
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1) Name of Stream Intermittent Stream near Sherman Street,	2) Location of Stream T29N-R7E Sec. 34 Extending west to 27 th and 27 th and extending south to Metro Square before outfalling to Rib River corridor.
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3) Stream Type Indicate Stream Class if Known <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Warm water <input type="checkbox"/> Trout-Class <input type="checkbox"/> Wild and Scenic River	4) Size of upstream Watershed Area .75 mi ² <input type="checkbox"/> Permanent Flow (year-round) <input checked="" type="checkbox"/> Temporary Flow (dry part of year)
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5) Stream Characteristics
a) Substrate ☒ Sand ☐ Silt ☐ Clay ☐ Cobbles ☒ Other-describe: Reinforced Concrete Culvert Pipe

Much of Channel plugged with sand. City of Wausau working with DNR on management option.

b) Average Water Depth 0-12"	c) Vegetation in Stream <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Present - If known describe:
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d) Identify Fish Species Present Forage fish species	e) If water quality data is available, include this information (e.g. DNR or local discharger might have such records). None.
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6) Are there any known endangered or threatened species affected by the project?
☒ No

Marathon County has been identified as a breeding group area for the bald eagle, which is on the Federally threatened list. However, no nests are present near the Big Rib River. Impacts to the state threatened species, the wood turtle (*Clemmys insculpta*), can be avoided by placing silt fence along the project to prevent the turtles from entering the construction area.

☐ Yes Identify the species and indicate whether it is on Federal or State lists.

☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.

☐ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.

7) If bridge replacement, are migratory bird nests present?
☒ No
☐ Yes – Identify Bird Species present: Estimated number of nests is:

8) Is a U.S. Fish & Wildlife Depredation Permit required to remove migratory bird nests?
☒ Not Applicable ☐ Yes ☐ No - Describe mitigative measures

9) Describe land adjacent to stream. If wetland, give type.
Land adjacent to this stream is mainly developed urban lands and parking lots. The lower reaches outfall to the combination of wetlands, forest, of the Rib River floodplain.

10) Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site.

This stream discharges into the Big Rib River approximately 1100 feet (335 m) to the south.

11) Section 404 Permit ☐ Not Applicable - No fill to be placed in wetlands

☐ Applicable - Fill will be placed in wetlands.
Indicate area of wetlands filled Acres (Hectares)

☒ Individual Section 404 Permit required

☐ General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404

Indicate which GP or LOP required

☐ Non-Reporting GP

☐ Provisional GP

☐ Provisional LOP

☐ Programmatic GP

12) Section 10 Waters

For navigable waters of the United States (Section 10) indicate whether the U.S. Coast Guard has been notified?

☐ No

☐ Yes - Describe results of Notification NA- coordination ongoing.

Identify which Nationwide Section 404 Permit is required

Indicate whether Preconstruction Notification (PCN) to the U.S. Corps of Engineers (USACE) is:

☐ Required

☐ Submitted on (Date) NA

Status of PCN

USACE has made the following determination on (Date) NA

USACE is in the process of review, anticipated date of determination is: (Date) NA

13) Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment. (Note: U.S. Coast Guard must be notified when Section 10 waters are affected by a proposal)

The intermittent stream passes beneath Sherman Street. This area of Sherman Street would be reconstructed under the preferred alternative. After reconstruction, the crossing structure would remain similar to the current corrugated metal pipe. This work is within the 100-year floodplain.

14) Discuss the effects of any backwater that would be created by the proposed action. Indicate whether the proposed activities would be consistent with NR 116, the National Flood Insurance Program, and Governor's Executive Order #73.

This existing backwater condition would be improved or maintained by the proposed structure. This is consistent with state and local floodplain zoning.

15) Describe and provide the results of coordination with any floodplain zoning authority.

Coordination was done with Marathon County Planning and Zoning Departments on floodplain identification. Based on this information, the best option for minimizing impacts was to remain within the existing roadway right-of-way as much as possible, to minimize new encroachments in the floodplain.

16) Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?:

☒ No impacts would occur

☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route

☐ Significant flooding with a potential for property loss and a hazard to life

☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

17) Discuss existing or planned floodplain use and briefly summarize the project's effects on that use.

No permanent effects will be created by this proposed action. Disturbance would only occur due to reconstruction of the facility.

18) Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream.

The primary impacts to water quality during construction would be erosion runoff from exposed grades and slopes and siltation that will carry with it sand, gravel, and dirt. After construction, the primary concern would be run-off from the roadway after rain or snow-ice thaws. There would be little additional impact to plants, animals, and fish since the nature of the proposed project is nearly the same as the original.

19) Describe proposed measures to minimize adverse effects or to enhance beneficial effects.

Erosion control measures implemented would conform to the contracts special provision and the standard specifications listed in WisDOT's Standards and Specifications for Road and Bridge Construction.

WisDOT, through TRANS 401 and the Cooperative Agreement, would comply with the substantive permit requirements of Chapter 283 Wis. Stats., Wisconsin Pollutant Discharge Elimination System.

Specific measures are discussed in Factor Sheet O, Erosion control/Stormwater Management.

20) Erosion control or storm water management measures that will be used to protect the stream are shown on The Erosion Control Factor Sheet and the Stormwater Management Factor Sheet:

☒ Yes

☐ No Briefly Describe measures to be used such as sheet piling, cofferdam, turbidity barrier, barges, construction blackout window, etc.

Wisconsin Department of Transportation
UPLAND HABITAT IMPACT EVALUATIONAlternative: C (VP/VE 4R)
Preferred? ☒ Yes ☐ NoPortion of project this sheet is evaluating if different from the first
Basic Sheet**1) Give a brief description of the upland habitat area. Include prominent plant community(ies) at the project site (list vegetation with an estimate of each community type if more than one present).**

The upland habitat area affected by the proposed project is mostly managed right-of-way area. This includes areas of roadway slopes, medians and previously acquired idle lands for interchanges. The project will be constructed within an urban/suburban area that has been previously disturbed by development. Most of the vegetation in these areas is composed of agronomic species and non-native species, such as bluegrass, fescue, and reed canary.

2) Identify and describe any observed or expected wildlife associations with the plant community(ies.)

Typical wildlife associations that utilize the upland habitat community include those of most terrestrial and aquatic species in a developed environment. Small mammals, nesting birds, invertebrates, reptiles and amphibians that require upland habitat for foraging, breeding, and cover are expected to exist in the project area. Road crossing mortality and other issues are expected for such species in an urban setting and a roadway intersecting a natural environmental corridor, such as the Big Rib River.

3) Identify the dominant plant community(ies) and estimate existing and proposed area of each dominant plant community to be altered.

<u>Uplands</u>	<u>Existing Area</u>	<u>Expected Alterations</u>
Mowed and Managed R/W	50%	Interchange areas will be converted to roadway. Some uplands will be disturbed for borrow.
Woodland Edge	20%	Clearing and grubbing will convert types.
Commercial and Residential developments	30%	Numerous relocations.

4) Are there any known endangered or threatened species affected by the project?☒ No

Marathon County has been identified as a breeding group area for the bald eagle, which is on the Federally threatened list. However, no nests are present near the Big Rib River. Impacts to the state threatened species, the wood turtle (*Clemmys insculpta*), can be avoided by placing silt fence along the project to prevent the turtles from entering the construction area. As part of the mainline environmental evaluation in the May 2001 FONSI, the DNR recommended reviews/surveys for birds, amphibians, and freshwater mussel species. The need for these assessments will be determined as project planning continues. See DNR agency coordination in Exhibit 7. Affected species and issues will be addressed once they are determined.

☐ Yes Identify the species and indicate whether it is on Federal or State lists.☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.☐ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.**5) Describe the nature of proposed work in the upland habitat area (e.g., grading, clearing, grubbing, etc.).**

The work would be primarily excavation/fill as required to construct the new typical section. Reconstruction and widening roadways will extend into existing upland right-of-way. Shrub and forest areas will be cleared and grubbed in project fill areas. Activity will also include installation/replacement of drainage structures, utilities, and bike path construction.

6) Identify and describe any known wildlife or waterfowl use areas or movement corridors that would be severed or eliminated by the proposed action. Include a discussion of the proposed action's effects upon the areas or corridors.

There is no obvious movement or use corridor other than current Big Rib River corridor and USH 51 roadway which serves as a barrier to upland and lowland animal movement. No areas would be eliminated by the project. If any areas are identified during subsequent environmental surveys, such areas would be avoided or protected during nesting/migration to minimize impacts.

Special temporary or permanent protective or directional barriers may be considered to minimize animal mortality at the Big Rib River. The DNR states that silt fence can be erected prior to May 1 to discourage turtles from entering the work area. A similar long-term approach to minimizing roadway mortality of turtles, reptiles, amphibians, and small mammals would be installing a sheet-metal barrier at the bottom of a rustic guardrail fence. The barrier could re-direct the species to a "critter pass" or road cross drain to reduce mortality.

7) Discuss other direct impacts on wildlife and estimate significance.

Mostly only developed land and mowed right-of-way will be affected by construction. If any habitat is disturbed, only edges or fringes of habitat will be affected. Few small mammals, nesting birds, invertebrates, and reptiles will be displaced.

8) Identify and discuss any probable secondary impacts that may be expected due to the project.

Special precautions will be taken when working in areas of purple loose strife and spotted knapweed to minimize the spread of these weeds.

9) Describe measures to minimize adverse effects or enhance beneficial effects.

The following options will be considered to address upland or lowland impacts:

- Cleaning of construction equipment.
- Adherence to provisions of on site disturbance techniques.
- Utilization of native species in the restoration mixes.
- Offsite disposal of exotic species vegetation from clearing and grubbing operations.

Wisconsin Department of Transportation
Erosion Control

Alternative: C (VP/VE 4R) Preferred? Yes	Portion of project this sheet is evaluating if different from the first Basic Sheet
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1. Give a brief description of existing and proposed slopes in the project area, both perpendicular and longitudinal to the project. Include both existing and proposed slope length and percent slope.
- 2.

Existing side slopes range from 6:1 to a maximum of 2.5:1 while existing profile contains vertical curves ranging from 3.5% to 5%. the proposed side slopes would range from 6:1 to a maximum of 3:1 while the proposed profile would range from 1.6% to 3.4%.

2. Indicate all natural resources in the project vicinity that are sensitive to erosion, sedimentation, or water quality degradation.

☒ Yes - Sensitive resources exist in the project area.

☒ River/stream

☒ Wetland

☐ Lake

☐ Endangered species habitat

☒ Other - Describe

Rib River Corridor and associated upland and lowland habitats.

☐ No - There are no sensitive resources affected by the proposal.

3. Identify each sensitive resource affected and provide specific recommendations on the level of protection needed.

Construction related and stormwater management based protective measures should be implemented at the construction area near the crossing of the Big Rib River.

The Big Rib River and its habitat types are identified as a sensitive resource. There are 4 types of wetlands and various uplands that will be affected by the proposed action. See factor sheets.

4. Indicate all circumstances requiring additional or special consideration.

a) ☒ Yes - Additional or special circumstances exist. Indicate all that are present.

☐ Areas of groundwater discharge

☒ Areas of groundwater recharge

☒ Overland flow/runoff

☐ Long or steep cut or fill slopes.

☒ Other - Describe

Wooded swamp and other areas may provide for groundwater recharge.

Vegetated swales and wet detention basins will be designed to infiltrate and treat runoff to the maximum extent practicable.

b) ☐ Yes - Describe any unique or atypical erosion control measures to be used to manage additional or special circumstances.

c) ☐ No - Additional or special circumstances are not present

5. Have erosion control measures received consensus from:

☒ DNR

County Land Conservation Committee

Native American Tribe

See DNR Coordination letter in Exhibit 7.

All Erosion Control measures identified in the Erosion Control Plan shall be coordinated through the DNR liaison process and TRANS 401 except when Tribal lands of Native Americans are involved. DNR does not issue concurrence without Erosion Control plans. In addition, TRANS 401 requires the contractor prepare an Erosion Control Implementation Plan (ECIP), which identifies timing and staging of the project's erosion control measures. On Tribal lands, coordination for 402 (erosion) concerns are either to be coordinated with the tribe affected or with the U.S. Environmental Protection Agency (EPA). EPA or the Tribes have the 401 water quality responsibility on Trust lands., describe how the Erosion Control /Storm water Management plan will be coordinated with Native American Tribes.

6. Describe overall Erosion Control strategy to minimize adverse effects and/or enhance beneficial effects.

Standard WisDOT erosion control methods would be used during construction as per WisDOT Standard Specifications for highway and structure construction. Temporary and permanent erosion control methods would include minimizing the amount of land exposed at one-time (staged construction), erosion bales, temporary seeding, silt fencing, erosion mats, rip-rap (river and channel banks), separating construction from live water, seeding and mulching, sediment traps, dust abatement, ditch or slope sodding, grass-lined conveyance (parallel to flow), distancing outfalls from waterway edge, vegetated filter strips (perpendicular to flow, and detention/retention basins. The area near the Mobil Station NW of I-39 and CTH NN has been proposed as previous stormwater detention basin. It and grass median strips could be constructed to serve as infiltration areas and sediment traps to minimize the effects to the Big Rib River.

Construction site erosion and sediment control would be part of the project's design and construction as set forth in TRANS 401 Wis. Adm. Code and the WisDOT/WisDNR Cooperative Agreement. An Erosion Control Implementation Plan (ECIP) would be prepared for approval by WisDNR prior to construction.

7. Identify the temporary and permanent erosion control measures to be utilized on the project.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Minimize the amount of land exposed at one time | <input checked="" type="checkbox"/> Seeding and mulching of exposed soils |
| <input checked="" type="checkbox"/> Erosion bales | <input checked="" type="checkbox"/> Detention basin |
| <input checked="" type="checkbox"/> Temporary seeding | <input checked="" type="checkbox"/> Sediment trap |
| <input checked="" type="checkbox"/> Silt fence | <input checked="" type="checkbox"/> Pave haul roads |
| <input checked="" type="checkbox"/> Ditch checks | <input type="checkbox"/> Dust abatement |
| <input checked="" type="checkbox"/> Erosion control re-vegetative mat | <input checked="" type="checkbox"/> Turf reinforcement mat |
| <input checked="" type="checkbox"/> Ditch or slope sodding | <input checked="" type="checkbox"/> Rip Rap |
| <input type="checkbox"/> Soil Stabilizer | <input type="checkbox"/> In-Stream Sediment Trap (as possible) |
| <input checked="" type="checkbox"/> Inlet Protection | |
| <input checked="" type="checkbox"/> Separating construction from live water - Describe method: Turbidity barriers would be used to separate debris from main channel/current of river during structure installations. | |
| <input checked="" type="checkbox"/> Other - Describe: The exhibit entitled, Exhibit 8 - Wetland and Stormwater Observations, should be reviewed and utilized during stormwater planning and erosion control plan development. | |

Wisconsin Department of Transportation
Storm Water Management

Alternative C (VP/VE 4R) Preferred? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Portion of project this sheet is evaluating if different from the first Basic Sheet
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Surrounding land use and a discussion of adopted plans are described on Basic Sheet 4

1. Indicate whether any natural resources exist in the project vicinity that are sensitive to water quality degradation.

☒ Yes - Sensitive resources exist in the project area.

☒ River/stream

☒ Wetland

☐ Lake

☒ Endangered species habitat

☒ Other - Describe

Rib River Corridor and associated upland and lowland habitats.

☐ No - There are no sensitive resources affected by the proposal.

2. Identify each sensitive resource affected and provide specific recommendations on the level of protection needed.

Construction related and stormwater management based protective measures should be implemented at the construction area near the crossing of the Big Rib River.

The Big Rib River and its habitat types are identified as a sensitive resource. There are 4 types of wetlands and various uplands that will be affected by the proposed action.

3. Indicate whether circumstances exist in the project vicinity requiring additional or special consideration.

a) ☒ Yes - Additional or special circumstances exist. Indicate all that are present.

☐ Areas of groundwater discharge

☒ Areas of groundwater recharge

☒ Overland flow/runoff

☐ Long or steep cut or fill slopes.

☐ Cold water stream

☒ Impaired waterway

☐ Exceptional/outstanding resource waters

☐ Other - Describe

Other: Wooded swamps/floodplain forest and shrublands, and river oxbows in the area provide for groundwater recharge and a natural environmental corridor.

Vegetated swales and wet detention basins will be designed to infiltrate and treat runoff to the maximum extent practicable in areas not requiring hard armor (concrete swale, rip rap, or other treatments).

b) Describe any unique, innovative, or atypical Storm Water Management measures to be used to manage additional or special circumstances.

No special consideration areas identified other than the Big Rib River and environs. See Exhibit 8 for Wetland and Stormwater Observations.

c) ☐ No - Additional or special circumstances are not present

4. Indicate whether any Drainage District may be affected by the project.

☐ Yes - Identify the affected drainage district

Initial coordination with drainage board has been completed

Discuss results

Initial coordination with DATCP has been completed

Discuss results

☒ No - There will be no effects to a recognized drainage district.

5. Indicate whether the project is within DOT's storm water management area. (NOTE: See Procedure 20-30-1, Figure 1, Attachment A4 the Cooperative Agreement between the Wisconsin Departments of Transportation and Natural Resources. Contact BoE's Storm Water Engineer or the District Environmental Coordinator for more details on the

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following areas.)

☐ Yes - The project affects one of the following regulated by a WPDES storm water discharge permit issued by the DNR.

☐ A DOT storm sewer system located within Phase One Municipalities (cities over 100,000 population).

☐ A DOT storm sewer system located within the five (5) Great Lakes Areas of Concern.

☐ A DOT storm sewer system located within Municipalities having populations of 50,000 or more where non-point source priority watershed projects are being implemented. (CONFIRM)

☐ A DOT storm sewer system designated pursuant to NR 216.02 (4) Wis. Admin. Code.

☒ No - The project is outside of WisDOT's storm water management area

6. Describe the overall storm water management strategy to minimize adverse effects and enhance beneficial effects.

Standard WisDOT guidelines for drainage-related erosion control measures and NR 151 standards for stormwater runoff control will be incorporated into the stormwater management strategy. The stormwater strategy will include vegetated swales and wet detention where possible (generally the Big Rib River and flatter project areas) to provide runoff treatment prior to discharge to the surrounding waters or wetlands. Whenever possible, the wet detention basins will drain overland to minimize impacts to the receiving waterways such as the Rib River and its' tributaries. Best management practices will be designed, installed, and maintained to infiltrate runoff to the maximum extent practicable.

See pending USH 51/STH 29 Stormwater Management Study: Proposed Conditions Rib River to Fox Glove Rd. Pending August 2002. This report provides cumulative stormwater management planning for the mainline corridor south of the Big Rib River and conceptual design plans for various stormwater recommendations. One of four potential basin areas is within this project area. A proposed 49 acre-foot wet detention basin has been recommended NW of USH51 and CTH NN. This would involve impacts to 4.5 acres of wooded swamp.

See Exhibit 8 - Wetland and Stormwater Observations

7. Indicate how the storm water management plan will be compatible with the storm water strategy .

8.

The stormwater management plan will be developed and provided to design teams to be incorporated into the project's design to reduce or minimize runoff impacts to surrounding waters. Coordination with the State DOT, DNR and municipalities is ongoing. Furthermore, the stormwater management plan will be in accordance with the stormwater ordinances and guidelines of local municipalities to reduce flooding, thereby reducing the erosive conditions associated with flooding.

8. Identify the storm water management measures to be utilized on the project.

☒ Grass-lined conveyance (parallel to flow)

☐ In-line storm sewer treatment - Describe

☐ Vegetated filter strips (perpendicular to flow)

☒ Catch basins

☒ Distancing outfalls from waterway edge

☒ Detention / retention basins

☒ Constructed storm water wetlands

☒ Infiltration basin / trench

See proposed multi-faceted, wetland mitigation plan

☒ Other - Describe Vegetated swales and wet detention a basin will be designed to infiltrate and treat runoff to the maximum extent practicable. Other recommendations may also be made according to existing conditions, , limitations, and final stormwater recommendations,

9. Are there any property acquisitions for storm water management purposes?

☐ No - There are no property acquisitions acquired for Storm Water Management purposes.

☒ Yes - Complete the following: Pending, per final Stormwater Management Plan Recommendations.

☐ Safety measures are not needed for potential conflicts with existing and expected surrounding land use.

☐ Safety measures are needed for potential conflicts with existing and expected surrounding land use.

Describe proposed safety measures

Wisconsin Department of Transportation
AIR QUALITY IMPACT EVALUATION

Alternative: C (VP/VE 4R) Preferred? Yes	Portion of project this sheet is evaluating if different from the first Basic Sheet
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Carbon Monoxide

1) Is this project exempt from air quality analysis under Wisconsin Administrative Code - NR 411?

- ☐ No - NR 411 exemptions do not apply
☒ Yes - NR 411 exemption(s) apply - Identify exemption(s) and explain why project is exempt.

The project is located in Marathon County, which is considered a metropolitan county. This project is exempt from NR 411 of the Wisconsin Administrative Code because the projected traffic volume increase during the peak hour ten years after construction is less than 1200 vehicles (NR 411.04(2)(b)(2)). It is also exempt because of the distance to the nearest receptor (NR 411.04(2)(b)(5.b)).

2) An air quality analysis was required.

- ☒ No
☐ Yes - Identify the air quality modeling technique or program used to perform the analysis. (Attach Carbon Monoxide Worksheet to this Factor Sheet to illustrate results.)

3) If an air quality analysis was performed, will a Construction Permit be required to address air quality before the project may proceed?

- ☒ No
☐ Letter of concurrence from DNR Bureau of Air Management requested. (See attached request letter - Exhibit __.
☐ Letter of concurrence received from DNR Bureau of Air Management. (See attached Exhibit ____.
☐ Yes - Indicate:

(DATE) Date permit requested

OR

(DATE) Date of Permit

Ozone

4) Is the project located in a county that is designated non-attainment or maintenance for ozone?

- ☒ No
☐ Yes - If yes one of the following boxes must be checked.
☐ This project is included in the (NAME TRANSPORTATION PLAN) and in the (NAME TRANSPORTATION IMPROVEMENT PROGRAM [TIP]) endorsed by the (NAME OF MPO), the region's Metropolitan Planning Organization. The TIP was found to conform by the FHWA and FTA (Date). The project is included in the TIP as project number (TIP PROJECT NUMBER).
☐ This project is located outside of a Metropolitan Planning Organization's boundaries and has received a positive conformity determination per the rural conformity section of the WisDOT/WDNR Memorandum Of Agreement regarding determination of conformity.
☐ This project is exempt per 40 CFR 93.134.
☐ Other, describe.

Wisconsin Department of Transportation
CONSTRUCTION STAGE SOUND QUALITY IMPACT EVALUATION

Alternative: C (VP/VE 4R) Preferred? Yes	Length of Center line and termini this sheet is evaluating (if different from Sheet 1) Sherman Street to West Bridge Street
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1) Identify and describe residences, schools, libraries, or other noise sensitive areas near the proposed action and which will be in use during construction of the proposed action. Include the number of persons potentially affected.

Construction will take place in a mixed residential and commercial area. Potentially up to 300 people may be affected by noise during construction. This is based on 64 residences being adjacent to the construction area.

2) Describe the types of construction equipment to be used on the project. Discuss the expected severity of noise levels including the frequency and duration of any anticipated high noise levels.

The noise generated by construction equipment will vary greatly, depending on equipment type/model/make, duration of operation and specific type of work effort. However, typical noise levels may occur in the 67 to 107 dBA range at a distance of 50 feet.

[NOTE TO AUTHOR – If a copy of the “CONSTRUCTION EQUIPMENT SOUND LEVEL figure is not available from the District Environmental Coordinator, a copy may be obtained from the BoE Noise Quality Engineer.]

3) Describe the construction stage noise abatement measures to minimize identified adverse noise effects.

To reduce the potential impact of construction noise, the special provisions for this project will require that motorized equipment shall be operated in compliance with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. At a minimum, the special provisions will require that motorized construction equipment shall not be operated between 7 PM and 6 AM without the prior written approval of the project engineer. All motorized construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It will also be required that mufflers and exhaust systems be maintained in good working condition, free from leaks and holes.]

Wisconsin Department of Transportation
TRAFFIC NOISE IMPACT EVALUATION

Alternative: C (VP/VE 4R) Preferred? Yes	Length of Center line and termini this sheet is evaluating (if different from Sheet 1) Sherman Street to West Bridge Street
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Need for Noise Analysis

1) Based upon a consideration of the traffic, roadway, terrain, and receiver characteristics affecting sound levels, could there be an increased traffic sound level as a result of this action?

- ☐ No - Complete only the Construction Noise Factor Sheet.
- ☒ Yes – Complete the Construction Noise Factor Sheet and the rest this Factor Sheet.

Traffic Data.

2) Indicate whether traffic volumes for sound prediction are different from the Design Hourly Volume (DHV) on Basic Sheet 5.

- ☒ No
- ☐ Yes - Indicate volumes and explain why they were used.

Automobiles __ Veh/hr

Trucks __ Veh/hr

Or percentage (T) __%

3) Identify and describe the noise analysis technique or program used to identify existing and future sound levels. (See attached receptor location map as Exhibit 12.)

The existing conditions and future conditions were modeled using the computer-modeling program, Stamina 2.0. Roadway elevations were obtained from project plans. Elevations near residences were obtained from USGS mapping.

4) Identify sensitive receptors, e.g., schools, libraries, hospitals, residences, etc. potentially affected by traffic noise. (See attached receptor location maps in Exhibit 12.)

All receptors are single family residences or businesses.

5) If this proposal is implemented, will future sound levels produce a noise impact?

- ☐ No
- ☒ Yes the impact will occur because:
- ☒ The Noise Abatement Criteria (NAC) is approached (1 dBA less than the NAC) or exceeded.
- ☐ Existing sound levels by 15 dBA or more.

6) Will traffic noise abatement measures be implemented?

- ☐ Not Applicable - Traffic noise impacts will not occur.
- ☒ No - Traffic noise abatement is not reasonable or feasible (explain why). In areas currently undeveloped, local units of government are to be notified of predicted noise levels for land use planning purposes. **(A COPY OF THIS WRITTEN NOTIFICATION SHALL BE INCLUDED WITH THIS DOCUMENT.)**

One eighteen-foot barrier wall was modeled using Stamina 2.0. Constructing barriers for noise abatement is not feasible for this project because the cost for construction exceeds \$30,000 per residence (TRANS 405.04 (2)(d)).

A sound barrier wall, about 2895 lineal feet, was modeled near the impacted residences numbered 46, 26, 35, 45, 36, 44, 43, 42, and 41 on the exhibits. Approximately seventeen impacted residences in this area have potential to benefit from a sound barrier wall. Assuming the average cost is \$18/ sq. ft of barrier, the cost for construction of a barrier wall in this area would be about \$55,175/residence.

- ☐ Yes - Describe any traffic noise abatement measures that will be implemented.

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Receptor Location or Site Identification (See attached Map) (a)	Distance from C/L of Near Lane To Receptor in feet (b)	Number of Families of People Typical of this Receptor Site * (c)	SOUND LEVEL LEQ (dBA)				Impact Evaluation			Difference in Future Noise and Future Noise with Barriers (Col. e minus Col. e2)
			Noise Abatement Criteria (NAC) (d)	Future Noise Level (e)	Future Noise Level w/ Barrier Walls (e2)	Existing Noise Level (f)	Difference in Future and Existing Noise Levels (Col. e minus Col. f) (g)	Difference in Future and Existing Abatement Criteria (Col. e minus Col. d) (h)	Impact or No Impact (I) or (*)	
									*	
1	550	One	67.0	54.2		53.5	0.7	-12.8	*	
2	270	One	67.0	56.8		55.9	0.9	-10.2	*	
3	150	One	67.0	58.7		57.3	1.4	-8.3	*	
4	130	One	67.0	59.6		58.0	1.6	-7.4	*	
5	150	One	67.0	62.0		62.1	-0.1	-5.0	*	
6	210	One	67.0	59.4		60.0	-0.6	-7.6	*	
7	230	One	67.0	58.6		60.0	-1.4	-8.4	*	
8	750	One	67.0	53.1		52.7	0.4	-13.9	*	
9	540	One	67.0	54.8		54.5	0.3	-12.2	*	
10	430	One	67.0	56.5		56.9	-0.4	-10.5	*	
11	190	One	67.0	58.6		60.0	-1.4	-8.4	*	
12	470	One	67.0	55.2		54.2	1.0	-11.8	*	
13	360	One	67.0	57.2		55.9	1.3	-9.8	*	
14	670	One	67.0	61.6		59.7	1.9	-5.4	*	
15	630	One	67.0	61.9		60.1	1.8	-5.1	*	
16	500	One	67.0	63.3		62.0	1.3	-3.7	*	
17	60	One	67.0	65.0		65.9	-0.9	-2.0	*	
18	720	One	67.0	61.2		59.7	1.5	-5.8	*	
19	850	One	67.0	60.0		58.2	1.8	-7.0	*	
20	160	One	67.0	62.0		62.1	-0.1	-5.0	*	
21	950	One	67.0	59.4		57.9	1.5	-7.6	*	
22	1030	One	67.0	58.6		56.8	1.8	-8.4	*	
23	1050	One	67.0	58.9		57.6	1.3	-8.1	*	
24	200	One	67.0	64.7		62.7	2.0	-2.3	*	
25	170	One	67.0	64.8		61.9	2.9	-2.2	*	
26	140	One	67.0	66.5	60.3	63.3	3.2	-0.5	I	6.2
27	270	One	67.0	64.2		61.1	3.1	-2.8	*	
28	260	One	67.0	64.2		61.9	2.3	-2.8	*	
29	270	One	67.0	64.0		61.9	2.1	-3.0	*	
30	430	One	67.0	61.4		59.1	2.3	-5.6	*	
31	470	One	67.0	61.2		58.7	2.5	-5.8	*	
32	480	One	67.0	61.4		58.6	2.8	-5.6	*	
33	450	One	67.0	61.6		58.7	2.9	-5.4	*	
34	480	One	67.0	61.1		58.3	2.8	-5.9	*	
35	110	One	67.0	68.2	58.6	65.9	2.3	1.2	I	9.6
36	120	One	67.0	67.5	61.2	66.0	1.5	0.5	I	6.3
37	660	One	67.0	59.5		56.8	2.7	-7.5	*	
38	840	One	67.0	58.0		55.3	2.7	-9.0	*	
39	280	One	67.0	63.5		61.5	2.0	-3.5	*	
40	270	One	67.0	63.6		61.8	1.8	-3.4	*	
41	150	One	67.0	67.6	62.3	66.7	0.9	0.6	I	5.3
42	130	One	67.0	67.7	60.9	66.6	1.1	0.7	I	6.8
43	130	One	67.0	67.5	58.3	66.2	1.3	0.5	I	9.2
44	120	One	67.0	67.3	58.4	65.9	1.4	0.3	I	8.9
45	120	One	67.0	67.8	59.8	66.0	1.8	0.8	I	8.0
46	150	One	67.0	66.1	57.2	62.9	3.2	-0.9	I	8.9
47	160	One	67.0	65.6	56.6	62.5	3.1	-1.4	*	9.0
48	80	One	67.0	65.8		65.9	-0.1	-1.2	*	

49	70	One	67.0	63.9		65.1	-1.2	-3.1	*	
50	200	One	67.0	61.2		61.5	-0.3	-5.8	*	
Receptor Location or Site Identification (See attached Map) (a)	Distance from C/L of Near Lane To Receptor in feet (b)	Number of Families of People Typical of this Receptor Site * (c)	SOUND LEVEL LEQ (dBA)				Impact Evaluation			
			Noise Abatement Criteria (NAC) (d)	Future Noise Level (e)	Future Noise Level w/ Barrier Walls (e2)	Existing Noise Level (f)	Difference in Future and Existing Noise Levels (Col. e minus Col. f) (g)	Difference in Future and Existing Abatement Criteria (Col. e minus Col. d) (h)	Impact or No Impact (I) or (*)	Difference in Future Noise and Future Noise with Barriers (Col. e minus Col. e2)
51	165	One	67.0	64.2		63.6	0.6	-2.8	*	
52	210	One	67.0	63.0		62.5	0.5	-4.0	*	
53	170	One	67.0	60.4		60.1	0.3	-6.6	*	
54	50	One	67.0	65.6		65.9	-0.3	-1.4	*	
55	50	One	67.0	64.8		66.2	-1.4	-2.2	*	
56	55	One	67.0	62.1		64.2	-2.1	-4.9	*	
57	60	One	67.0	62.3		65.1	-2.8	-4.7	*	
58	70	Business	72.0	62.9		65.0	-2.1	-9.1	*	
59	310	Business	72.0	61.9		62.0	-0.1	-10.1	*	
60	55	Business	72.0	66.5		65.1	1.4	-5.5	*	
61	60	Business	72.0	65.2		66.2	-1.0	-6.8	*	
62	50	Business	72.0	65.5		64.4	1.1	-6.5	*	
63	110	Business	72.0	63.1		62.0	1.1	-8.9	*	
64	145	Business	72.0	68.7		65.8	2.9	-3.3	*	
65	250	Business	72.0	56.6		54.9	1.7	-15.4	*	
66	160	Business	72.0	58.9		57.4	1.5	-13.1	*	
67	160	Business	72.0	62.1		60.6	1.5	-9.9	*	
68	100	Business	72.0	72.2		68.5	3.7	0.2	I	
69	215	Business	72.0	66.1		65.3	0.8	-5.9	*	
70	70	Business	72.0	66.2		66.2	0.0	-5.8	*	
71	130	Business	72.0	66.5		64.6	1.9	-5.5	*	
72	175	Business	72.0	66.4		62.7	3.7	-5.6	*	

Wisconsin Department of Transportation

HAZARDOUS SUBSTANCES OR UNDERGROUND STORAGE TANKS (UST's)

REV 11-21-96

Alternative: C (VP/VE 4R)
Preferred? Yes

Portion of project this sheet is evaluating if different from the first Basic Sheet

1) Briefly describe the results of the initial project review on the parcels affected by this project.

A total of 63 sites of environmental concern were identified. The list was narrowed by the record review to 29 sites that were observed. Four additional sites of concern were identified during the site observations. Eight sites were identified for additional investigation. See Exhibit 13.

2) Indicate the type(s) of contamination (if any) suspected to be affecting sites in the project area.

Site 70	Petroleum
Site 108/J	VOCs, PAHs, heavy metals
Site 7	Petroleum, VOCs, PAHs, heavy metals, may be other
Site 19	Heavy metals, primarily lead
Site 53	Petroleum, VOCs, PAHs, heavy metals, may be other
Site 32	Petroleum, VOCs, PAHs, heavy metals, may be other
Site U	Primarily petroleum; may be VOCs, heavy metals, other
Site RR	Petroleum, heavy metals

3) Indicate the number and identify the parcels which are determined to require an Environmental Site Investigation or for which the Initial project review was not conducted.

Site identified for additional environmental site investigation are:

Site 70
Site 108/J
Site 7
Site 19
Site 53
Site 32
Site U
Site RR

4) Describe proposed course of action to avoid hazardous materials contamination for this project. For example, changes in location, changes in design, remediation of contaminated areas, etc.

Site 70	Remediation
Site 108/J	Remediation
Site 7	Remediation
Site 19	Remediation, changes in design
Site 53	Remediation
Site 32	Remediation
Site U	Remediation
Site RR	Remediation, changes in design

Wisconsin Department of Transportation
AESTHETICS

Alternative: C (VP/VE 4R) Preferred? Yes	Portion of project this sheet is evaluating If different from the first Basic Sheet.
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1. Identify the alternative discussed on this sheet if it is different from the proposed action addressed in item on the first Basic Sheet or is different from the "Preferred Alternative" identified on the second Basic Sheet.

N/A

2. Identify and briefly describe the visual character of the landscape. Include elements in the view shed such as landforms, water bodies, vegetation and human developments.

North of Mallard Lane the corridor crosses through a landscape characterized by forested lowland and wetland areas. The crossing of the Rib River is of particular visual interest. North Of Sherman Street, the corridor is mostly commercial and residential.

3. Indicate the visual quality of the view shed and identify landscape elements that would be visually sensitive.

Areas that would be visually sensitive would be adjacent wetlands, wooded canopy, the Big Rib River crossing, and freeway interchange areas.

4. Identify the viewers who will have a view of the improved transportation facility and those with a view from the improved transportation facility. Indicate the relative numbers (low, medium, high) of each group.

A high number of local residents live on or near the corridor and they will have view of the improved transportation facility. A high number of individuals are expected to travel/utilize the corridor as commuters, local and through traffic, and tourists. A low number of views is also represented by boaters and snow mobiles on the Rib River.

5. Indicate the relative time of day (morning, afternoon, evening, night) and the approximate amount of viewing time each viewer group would have each day.

Local residents that live on or near the corridor would have the same amount of view time as they currently do now. The relative time of day of viewing time would not vary after project construction.

Commuters would view the corridor at peak am and PM commuting hours ; viewing time would varying according to destination.

6. Describe whether and how the project would affect the visual character of the landscape.

The current view sheds would be altered because of the elevation roadway for the necessary fly-over ramps. Some roadways will be elevated 40-50 feet from the existing profile. Most of the increased roadway elevations are in the local commercial district of the STH29 West Interchange. Natural environment areas will not be substantially altered other than the widened USH512 river crossing corridor. The intersection north of the Rib River is an important consideration of aesthetics and design. Natural and traditional landscaping will be used to restore an aesthetically pleasing landscape.

7. Indicate the effects the project would have on the viewer groups.

Commuters traveling STH 29 to I39/ USH 51 north or south will have a new view landscape dependent on final destinations/ramp and road exits. The I39/USH51 mainline and other project areas will maintain the same view landscape because of the linear nature of the corridor.

8. Discuss mitigation measures to avoid or minimize adverse visual effects or enhance positive aesthetic effects of the project.

Where practicable efforts will be made to minimize or avoid negative effects on view sheds in the project area of wetlands, wooded areas, or the Big Rib River crossing. Aesthetic plantings and architectural features will be considered to the extent possible.